



SAFETY DATA SHEET

Issue Date 02-23-2017

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Version 2

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name: A/C ODOR TREATMENT

Other means of identification

Common Name: 1050
UN/ID No UN1950
Synonyms None
Product Categories Aerosol Automotive air conditioner odor treatment

Recommended use of the chemical and restrictions on use

Sale and Use Restrictions Not applicable
Recommended Use Restricted to professional users.
Uses advised against Consumer use

Details of the supplier of the safety data sheet

Supplier Address
MOC PRODUCTS CO., INC.
12306 Montague Street
Pacoima, CA 91331

Emergency telephone number

Company Phone Number MOC PRODUCTS CO., INC. (818) 794-3500
Emergency Telephone CHEMTREC 1-800-424-9300

2. HAZARDS IDENTIFICATION

Classification

Flammable aerosols	Category 2
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Label elements

Emergency Overview

Warning

Hazard statements

Flammable aerosol
Pressurized container: May burst if heated



Appearance Aqueous solution,
Compressed gas

Physical state Aerosol

Odor Alcohol

Precautionary Statements - Prevention

Keep away from heat/sparks/open flames/hot surfaces. — No smoking
 Do not spray on an open flame or other ignition source
 Pressurized container: Do not pierce or burn, even after use

Precautionary Statements - Response

Precautionary Statements - Storage

Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F

Hazards not otherwise classified (HNOC)

Other information

- Toxic to aquatic life with long lasting effects
- 26.42 % of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS Number	Weight %	Trade Secret
1, 1 Difluoroethane	75-37-6	20-30	*
Ethyl alcohol	64-17-5	10-20	*

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

First aid measures

Skin contact	Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse.
Inhalation	Move to fresh air in case of accidental inhalation of vapors. If breathing is labored, administer oxygen. If not breathing, give artificial respiration. Seek medical attention.
Eye contact	Immediately flush eyes for at least 15 minutes. Get medical attention.
Ingestion	Do not induce vomiting. Call a physician or Poison Control Center immediately.
Notes to Physician	Do not give adrenaline or similar drugs.

Most important symptoms and effects, both acute and delayed

Symptoms	Drowsiness, Dizziness, Coughing and/ or wheezing; Unconsciousness, Eye irritation, Skin irritation.
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Indication of any immediate medical attention and special treatment needed

Self-protection of the first aider	Avoid breathing vapors or mists. Avoid contact with skin.
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5. FIRE-FIGHTING MEASURES

Suitable extinguishing media:

Use dry chemical, CO₂, water spray (fog) or alcohol resistant foam.

Small Fire	Dry chemical or CO ₂ .
Large Fire	Water spray or fog, Alcohol resistant foam.
Explosive properties:	Pressurized container: May burst if heated. Risk of explosion if heated under confinement.

May form explosive peroxides.

Specific hazards arising from the chemical

Flammable aerosol. Pressurized container: May burst if heated. Contents under pressure. Keep away from open flames, hot surfaces and sources of ignition. Vapors are heavier than air and may spread along floors. Thermal decomposition can lead to release of toxic/corrosive gases and vapors. Vapors may travel to areas away from work site before igniting/flashing back to vapor source.

Hazardous combustion products Carbon monoxide, Carbon dioxide (CO₂), Hydrocarbons, Hydrogen fluoride, Carbonyl fluoride.

Specific methods:

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge May be ignited by heat, sparks or flames.

Special firefighting procedures:

FLAMMABLE AEROSOL. As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Keep exposed unopened containers cool to prevent rupture. Water mist may be used to cool closed containers.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions: Remove all sources of ignition. Pay attention to flashback. Ventilate closed spaces before entry. Use spark-proof tools and explosion-proof equipment. Avoid contact with skin, eyes and clothing. Use personal protective equipment. See Section 8 for information on appropriate personal protective equipment.

For emergency responders Use personal protection recommended in Section 8. Remove all sources of ignition. Pay attention to flashback. Ventilate the area.

Environmental precautions

Environmental precautions: Environmental hazard: Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. Water runoff can cause environmental damage. Avoid subsoil penetration.

Methods and material for containment and cleaning up

Methods for Containment Stop leak if you can do it without risk. Remove all sources of ignition. Ventilate the area. Use non-sparking tools.

Methods for clean-up: Pressurized container: Do not pierce or burn, even after use. Clean-up methods - small spillage: Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a chemical waste container for later disposal. Large spills present a vapor explosion and liquid fire hazard; evacuate area and ensure response by personnel trained and equipped to respond to flammable material incident or off-site emergency responders or fire department.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling: Pressurized container: Do not pierce or burn, even after use. Keep product and empty container away from heat and sources of ignition. Protect from physical damage. Protect from freezing (<0°C, or 32°F). Do not store at temperatures above 120°F (50°C). Store in a cool, well ventilated area. Keep away from any incompatible materials (See Section 10). Misuse or intentional inhalation abuse may cause death without warning symptoms, due to cardiac effects.

Conditions for safe storage, including any incompatibilities

Technical measures/precautions: Mechanical ventilation required if used indoors on a continuous basis.

Materials to avoid: Light and/or alkaline metals, Alkaline earth metals, Acids, Bases, Oxidizing agents, Amines, Ammonia, Peroxides, Halogens.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Control parameters****Exposure Guidelines**

Components	ACGIH TLV	OSHA Exposure Limits:	NIOSH IDLH
1, 1 Difluoroethane 75-37-6	-	Not established	-
Ethyl alcohol 64-17-5	STEL: 1000 ppm	TWA: 1000 ppm TWA: 1900 mg/m ³	IDLH: 3300 ppm TWA: 1000 ppm TWA: 1900 mg/m ³

Other information WEEL (Workplace Environmental Limit) 8 hr TWA AIHA: 1,1 Difluoroethane (CAS#75-37-6) 1000 ppm TWA 8Hrs.

Appropriate engineering controls

Engineering measures: Ensure adequate ventilation, especially in confined areas. Mechanical ventilation required if used indoors on a continuous basis.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin and body protection Wear normal work clothing, Chemical resistant gloves: (consult with the specific manufacturer to confirm performance).

Respiratory protection Ensure adequate ventilation. No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required. A respiratory protection program that meets or is equivalent to OSHA 29 CFR 1910.134 and ANSI Z88.2 should be followed whenever workplace conditions warrant a respirator's use.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice. When using do not eat, drink or smoke. Avoid contact with eyes, skin and clothing. Use personal protective equipment. Wear suitable gloves and eye/face protection. Avoid breathing vapors or mists. Wash face, hands and any exposed skin thoroughly after handling. Take off contaminated clothing and wash it before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES**Information on basic physical and chemical properties**

Physical state	Aerosol	Odor	Alcohol
Appearance	Aqueous solution, Compressed gas	Odor threshold	No information available
Color	Cloudy White		
Property	Values	Remarks • Method	
pH	N/A	Not applicable	
Melting point/freezing point	No information available		
Boiling point / boiling range	No information available . / .		
Flash point	No information available . / .	Not applicable	
Evaporation rate		Slower than ether	
Flammability (solid, gas)	No information available		
Flammability Limits in Air			

Upper flammability limit	No Data Available	
Lower flammability limit	No Data Available	
Vapor pressure	>501 kPa	@ 18.3 °C
Vapor density	Heavier than air	
Specific Gravity	0.95	Of liquid
Water solubility	Completely soluble	
Solubility in other solvents	No Data Available	
Partition coefficient	No Data Available	
Autoignition temperature	No Data Available	
Decomposition temperature	No Data Available	
Kinematic viscosity	No information available	
Dynamic viscosity	No Data Available	
Explosive properties	No Data Available	
Oxidizing properties	No Data Available	

Other information

Softening point	No Data Available
Molecular weight	No Data Available
VOC Content (%)	
VOC Content (%)	21.6
	Contains California VOC exempt solvent
Density	0.95 g/cc (liquid)
Bulk density	No Data Available

10. STABILITY AND REACTIVITY

Reactivity

Reactivity Stable under normal conditions.

Chemical stability

Stability Keep away from flames and hot surfaces. Keep away from direct sunlight.

Possibility of Hazardous Reactions

May form explosive peroxides.

Hazardous polymerization

Hazardous polymerization does not occur.

Conditions to avoid

Heat, flames and sparks. Temperatures above 120 °C.

Incompatible materials**Materials to avoid:**

Light and/or alkaline metals, Alkaline earth metals, Acids, Bases, Oxidizing agents, Amines, Ammonia, Peroxides, Halogens.

Hazardous Decomposition Products

Hazardous Decomposition Products Carbon monoxide, Carbon dioxide (CO₂); Hydrocarbons, Hydrogen fluoride; Carbonyl fluoride.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure**Product Information**

May be harmful if swallowed. May cause eye irritation. May cause skin irritation.

Inhalation

High vapor/aerosol concentrations (> ~100 ppm) are irritating to the respiratory tract and may cause headaches, dizziness, anesthesia, drowsiness, unconsciousness, and other central nervous system effects, including death.

Eye contact

May cause irritation.

Skin Contact

Prolonged skin contact may defat the skin and produce dermatitis.

Ingestion

Small amounts of this product aspirated into the respiratory system during ingestion or vomiting may cause mild to severe pulmonary injury.

Components	Oral LD50	Dermal LD50	Inhalation LC50
1, 1 Difluoroethane 75-37-6	>1500 mg/kg (Rat)	-	=64000 ppm (Rat) 4h
Ethyl alcohol 64-17-5	= 7060 mg/kg (Rat)	-	= 124.7 mg/L (Rat) 4 h

Information on toxicological effects

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization	Skin Sensitization: Not expected. Respiratory Sensitization: Not classified.
Mutagenic effects:	1,1 Difluoroethane (CAS#75-37-6) has not produced genetic damage in bacterial cultures. There are reports indicating this compound produced genetic damage in some mammalian cell culture tests. A weak genotoxic effect in the germ cells of Drosophila melanogaster (fruit fly) has been reported. It has not been tested in animals.
Carcinogenicity	Category 3: Not Classifiable. Ethanol has been shown to be carcinogenic in long-term studies only when consumed as an alcoholic beverage.
Reproductive toxicity	Ethanol has been shown to be a reproductive toxin only when consumed as an alcoholic beverage.
STOT - single exposure	Not classified.
STOT - repeated exposure	Not classified.
Chronic toxicity	Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal. Prolonged skin contact may defat the skin and produce dermatitis.
Target Organ Effects	Eyes, Liver, Kidney, Heart, Central nervous system.
Neurological effects	Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting. Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal.
Other adverse effects	1,1 Difluoroethane - Cardiac Sensitization -Low Observed Adverse Effect Concentration - (LOAEC)/Dog - 150000 ppm.
Aspiration hazard	Risk of serious damage to the lungs (by aspiration).

Numerical measures of toxicity - Product Information

Unknown Acute Toxicity	26.42 % of the mixture consists of ingredient(s) of unknown toxicity
The following values are calculated based on chapter 3.1 of the GHS document .	
ATEmix (oral)	31599 mg/kg
ATEmix (dermal)	24539 mg/kg
ATEmix (inhalation-dust/mist)	7.7 mg/l
ATEmix (inhalation-vapor)	558.1 mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chronic Aquatic Toxicity: Toxic to aquatic life with long lasting effects.

27.39 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

Components	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Ethyl alcohol 64-17-5		12.0 - 16.0: 96 h Oncorhynchus mykiss mL/L LC50 static 100: 96 h Pimephales promelas mg/L LC50 static 13400 - 15100: 96 h Pimephales promelas mg/L LC50 flow-through		9268 - 14221: 48 h Daphnia magna mg/L LC50 2: 48 h Daphnia magna mg/L EC50 Static

Persistence and degradability

No information available.

Bioaccumulation

Bioaccumulative potential.

Mobility

Soluble in water.

13. DISPOSAL CONSIDERATIONS**Waste treatment methods**

Disposal of wastes	Dispose of in accordance with federal, state and local regulations.
Contaminated packaging	Pressurized container: Do not pierce or burn, even after use. Dispose of in accordance with federal, state and local regulations.

14. TRANSPORT INFORMATION**DOT**

UN/ID No	UN1950
Proper Shipping Name:	Aerosols
Hazard Class	2.1
Packing Group:	N/A
Emergency Response Guide Number	126

IATA

UN/ID No	UN1950
Proper Shipping Name:	Aerosols
Hazard Class	2.1
Packing Group:	N/A

IMDG

UN/ID No	UN1950
Proper Shipping Name:	Aerosols
Hazard Class	2
Packing Group:	N/A

Limited quantity (LQ) < 1 Liter

15. REGULATORY INFORMATION**International Inventories****Legend:**

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List

Federal Regulations**SARA 313**

No SARA 313 chemicals are present above the reporting threshold.

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	Yes
Fire hazard	Yes
Sudden release of pressure hazard	Yes
Reactive Hazard	No

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):

State Regulations (RTK)**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations**U.S. EPA Label Information**

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION**NFPA Rating**

Health hazards 1

Flammability -

Instability 0

Physical and Chemical Properties NFPA Level 2 aerosol

HMIS Rating

Health hazards 1

Flammability 3

Physical hazards 1

Personal protection B

Prepared by Environmental Health and Safety Department

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Revision Note

Formula. This data sheet contains changes from the previous version in section(s): 7,11

Disclaimer

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet